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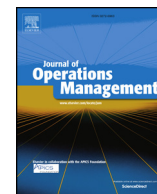
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Developing country sub-supplier responses to social sustainability requirements of intermediaries: Exploring the influence of framing on fairness perceptions and reciprocity

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ABSTRACT

Research on social sustainability in multi-tier supply chains is limited. Specifically, we know very little about a) the micro-processes involved in the way in which sub-suppliers (i.e., first-tier suppliers or sourcing agents) respond to the sustainability requirements imposed by their intermediaries; and b) the micro-level antecedents that condition their responses. To address these gaps, we used a longitudinal multiple case study method to explore multiple intermediary – sub-supplier dyads in South India's knitwear garment industry and drew upon constructs of behavioural economics. We found that the way in which intermediaries frame social sustainability requirements and their associated procedures influence both the way in which sub-suppliers perceive the procedural fairness of those requirements and the way in which they thus reciprocate. When intermediaries frame social sustainability requirements as 'opportunity' and engage in various procedures perceived to be procedurally fair by sub-suppliers, the latter reciprocate positively. Contrastingly, when intermediaries frame social sustainability requirements as 'insulation' and engage in various procedures perceived to be procedurally unfair by sub-suppliers, the latter reciprocate negatively. Under the production-dominant framing, sub-suppliers exhibit positive reciprocity only related to processing production orders. Our analysis inductively generated propositions that emphasize the important role played by framing in shaping the perceptions of fairness held by sub-suppliers towards social sustainability requirements and the reciprocity of the latter's responses to them.

1. Introduction

Social sustainability in supply chains is mainly concerned with improving the rights, welfare and entitlements of workers and enhancing the quality of their employment (Huq et al., 2016). The increasing global reach and complexity of many multi-tier global supply chains poses particular challenges for 'lead' firms trying to manage social sustainability (Mena et al., 2013). Much of this complexity stems from the supply chain's exposure to institutional environments characterized by weak legal frameworks (Khalid et al., 2015). In multi-tier supply chains, most social sustainability outcomes are, inevitably, a product of practices and activities that arise beyond the boundaries of the lead firm. However, effectively influencing the practices of firms beyond first-tier dyadic relationships (direct buyer-supplier) is complicated by the increasingly global scope of supply relationships (Seuring et al., 2008), the lack of information on the identity and activities of sub-suppliers (i.e., second-tier to n^{th} -tier firms) (Wilhelm et al., 2016), and the absence or weakness of traditional contractual governance

mechanisms and institutions responsible for enforcing contracts, more likely in developing countries (Grimm et al., 2014). The challenges linked to ensuring social sustainability beyond direct supply relationships have meant that many of the severe and damaging examples of unsustainable conduct have arisen in the context of sub-supplier factories (Grimm et al., 2016).

The recognition of the difficulties associated with directly managing social sustainability at the sub-supplier level has resulted in lead firms transferring the responsibility to first-tier suppliers or sourcing agents (henceforth, intermediaries). For example, Wilhelm et al. (2016) showed how and under what conditions first-tier suppliers take on a double agency role that sees them acting as agents for their lead firms implementing the sustainability requirements in their own operations, and acting as agents to make their suppliers implement the sustainability requirements imposed by the lead firms. Similarly, Soundararajan et al. (2018) explored the boundary-spanning role played by the sourcing agents commonly found in the textile and garment supply chains in improving working conditions. They showed

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that, under certain conditions, sourcing agents act as boundary spanners performing work aimed at dismantling or bridging the various boundaries that affect the interaction between lead firms and sub-suppliers with respect to improving working conditions. While they highlighted the shifting roles played by intermediaries, research on the conditions under which sub-suppliers in developing countries, who depend on ad-hoc spot production contracts granted by intermediaries, positively or negatively respond to their social sustainability requirements is extremely scant. Specifically, the extant research has shed relatively little light on the ‘micro-level behavioural processes’ or ‘micro-processes’ that are involved in the sub-supplier management of social sustainability requirements and related exchanges between sub-suppliers and intermediaries. Micro-processes refer to interpersonal and interactional processes (Staw and Sutton, 2000). Therefore, it is the sub-supplier - intermediary dyads, and the interaction between them with respect to social sustainability requirements, especially sub-suppliers’ perceptions of the way in which the requirements are imposed, that are of central importance to this research.

Therefore, in this article, we ask two questions. a) What micro-processes are involved in the response of sub-suppliers to the social sustainability requirements imposed by their intermediaries? b) What are the micro-level antecedents that condition the responses of sub-suppliers? We explore these questions by means of an in-depth longitudinal multiple case study of intermediary-sub-supplier dyads located in Tirupur, India. Specifically, by drawing on theoretical constructs from behavioural economics—namely, procedural fairness (Folger and Konovsky, 1989), reciprocity (Fehr and Gächter, 1998) and framing (Levin et al., 1998)—we explore the conditions under which sub-suppliers perceive social sustainability requirements as either fair or unfair and, thus, on the likelihood that they will reciprocate in those dyadic relationships by attempting to meet social sustainability requirements. Our study of the micro-level processes involved in multi-tier supply relationships shows the connection between intermediaries’ framing of social sustainability requirements and associated procedures, and sub-suppliers’ perceptions of fairness and reciprocity.

Our findings make several important contributions. First, by adopting a micro-level lens, we show the importance of intermediaries’ framing of sustainability requirements in triggering different types of procedural fairness perceptions and reciprocity in developing country sub-suppliers. Second, while literature on framing (e.g. Levin et al., 1998) suggests that framing alone can induce behavioural changes, our findings show that framing of social sustainability requirements has to be coupled with associated procedures to influence fairness perceptions and reciprocal behaviour of sub-suppliers. Third, our study contributes to the crisis literature (Bundy et al., 2017) by capturing framing maintenance and framing shift induced by crisis situations, and the importance of establishing positive pre-crisis stakeholder relationships for effective crisis management. Finally, the study also contributes to emerging behavioural operations management research by qualitatively capturing the micro-level exchanges between sub-suppliers and intermediaries with respect to social sustainability. These findings highlight the importance of moving beyond instrumental approaches to social sustainability like pressure, financial incentives, or penalties and focus on relational processes like dialogue, collaboration, and trust-building (Jiang, 2009). We argue that understanding the micro-level processes is critical for the development of innovative sub-supplier management practices that encourage improved social sustainability across multiple tiers of global supply chains.

Our paper proceeds as follows. We begin by offering a review of the literature on social sustainability in global supply chains, framing, fairness perception and reciprocity, and present our conceptual model. Then, we describe the research design adopted to answer the research questions, followed by a comprehensive discussion of the findings emerging from the data. This is followed by a discussion of the findings and the development of propositions. Finally, we conclude by offering a summary of key findings, and discuss the theoretical and practical

implications, limitations, and future research directions.

2. Literature review

According to Wilhelm et al. (2016), most serious social failures happen at the sub-supplier level of global supply chains. For instance, in 2011, the Dutch based non-governmental organization (NGO) Centre for Research on Multinational Corporations (SOMO) published a report titled ‘Captured by Cotton’, which exposed the widespread exploitation of young girls in Indian garment sub-supplier facilities that produce for well-known brands like ASOS, Next, C & A, Mothercare, and H & M. This report attracted numerous local and international activists, media coverage, and public debates pressurizing brands and retailers. The social impact of the poor management of social sustainability issues in developing country supplier facilities is immense. Continuing occurrences of worker suicide in the factory of Apple’s Chinese supplier Foxconn (The Wall Street Journal, 2016), fire accidents in Bangladeshi factories even after the Rana Plaza disaster (AlJazeera, 2016), and modern slavery practices in supplier facilities in Southern India (Indian Committee of the Netherlands, 2017) are some instances of key evidence of the inadequate management of social sustainability.

Given the weak regulatory settings found in these contexts, private social sustainability requirements—in the form of third-party certifications and lead firm codes of conduct (CoCs)—have emerged as the primary means through which lead firms monitor and improve social sustainability in their supply chains (Locke et al., 2009). These requirements are rooted in International Labor Organization (ILO) conventions and local regulations, and share the common intention of improving social sustainability in supply chains. Although social sustainability requirements are growing, research, media, and NGO reports frequently remind us of their serious limitations in bringing about genuine improvements. Some scholars have even argued that, at times, such requirements push suppliers to engage in unethical behaviours (e.g., Awaysheh and Klassen, 2010; Lund-Thomsen and Lindgreen, 2014).

Until recently, very few studies focussed on the ways in which social sustainability requirements must be designed and implemented for improved compliance among developing country suppliers (e.g., Bartley, 2011; Jiang, 2009). For example, Bartley (2011) developed an institutional layering approach and argued that, to increase compliance, social sustainability requirements must be layered on multiple other institutional norms and regulations in the contexts in which suppliers are located. Based upon a study of Chinese apparel and textile suppliers, Jiang (2009) argued that an arm’s length relationship management approach reduces compliance among suppliers, while a collaborative one improves it.

Due to the complexity of their global supply chains, it is problematic for lead firms to manage suppliers beyond those in first-tier (Wilhelm et al., 2016). Because of their indirect relationship with sub-suppliers, information asymmetry, and limited transparency, the traditional control and/or pressure exercised by lead firms tend to have limited influence on the former’s behaviours (Grimm et al., 2016). Thus, lead firms transfer the responsibility of managing sub-suppliers to their first-tier suppliers or middlemen (Grimm et al., 2014). According to Wilhelm et al. (2016), first-tier suppliers or middlemen act as intermediaries and play a double agent role by implementing sustainability in their own operations and by ensuring that their own suppliers comply with the requirements of sustainability standards. These important insights notwithstanding, we still lack an in-depth understanding of the developing country sub-suppliers’ perspectives and behaviours towards social sustainability demands and the micro-level interactions occurring between the intermediaries and the sub-suppliers that shape them.

2.1. Challenges faced by developing country sub-suppliers

Sub-suppliers in developing countries face at least three challenges

when dealing with social sustainability requirements. The first is resource scarcity; most developing country sub-suppliers, especially in the garment and textile industry, are small and resource-deprived (Lund-Thomsen and Nadvi, 2010). They lack the resources, skills, networks, knowledge, and other organizational capabilities required to decipher and manage sustainability requirements. They depend on lead firms and intermediaries for their survival (Lund-Thomsen and Lindgreen, 2014), and earn profits lower than those made by lead firms and intermediaries. Consequently, unlike corporations, they do not employ highly educated and trained strategists or corporate responsibility officials to help them cope with sustainability requirements. Their everyday management routines are likely to be simple and relational. They utilize their social networks to informally acquire the knowledge pertaining to operating a factory or a farm (Ernst and Kim, 2002). Some factories and farms are owned by former workers, and as owners, they utilize the knowledge gained during their employment (Soundararajan and Brown, 2016). The acquisition of social sustainability related knowledge is path dependent (Wiengarten and Pagell, 2012) and may require strong learning and future orientations. Being led by former workers or farmers, most sub-suppliers in developing countries face a steep learning curve without having the appropriate foundational skills and orientations. Therefore, their social sustainability strategies are likely to be informal, ad hoc, and experiential.

Second, they face fierce competition. More often than not, the quantity of orders they receive is unevenly spread out across any given year (Lund-Thomsen and Lindgreen, 2014). Also, they are not permanently contracted to intermediaries. Intermediaries grant them informal spot production order contracts, the traditional nature of commercial relationships at this level, especially in developing countries. Sub-suppliers need to fiercely compete with numerous similar firms to obtain these contracts. Consequently, to survive, they often feel compelled to violate labour regulations and push their workers to make the most of a given order (Awaisheh and Klassen, 2010). Some sub-suppliers go to the extreme of simultaneously processing multiple production orders (Soundararajan et al., 2016).

The third challenge is the lack of institutional and market support in developing countries (Mair and Marti, 2009). Developed countries are furnished with advanced institutional arrangements and efficient market intermediaries. In contrast, developing countries are characterized by absent and/or weak institutional arrangements and market imperfections, which obstruct efficient production, capital, and labour market activities, and the resultant social and economic development (Khanna and Palepu, 2000). Managing social sustainability requirements is thus not straightforward or formulaic (Grimm et al., 2016), nor is it reinforced by supporting institutions and markets. Rather, sub-suppliers, with their limited resources and knowledge, need to navigate in and around (Mair and Marti, 2009) such weak and/or absent institutional and market arrangements to meet requirements by means of whatever is at hand.

2.2. Fairness perception and reciprocity

Economic theories—such as resource dependence theory (Taylor et al., 1996), transaction cost economics (Williamson, 1979), and agency theory (Gomez-Mejia and Balkin, 1992)—posit that, under favourable real world conditions such as those described above, individuals engage in deceptive or opportunistic activities in the pursuit of their own self-interest. According to Granovetter (1985), these theories do not consider social behaviour and include any value beyond that of the economic exchange sought by individuals. Decades of behavioural economics research have suggested that, when faced with pressures, uncertainty, information asymmetry, and high stake conditions (Fehr et al., 2002), not all individuals act as self-interested utility maximizers (Bosse et al., 2009). Instead, individual actions are conditioned by ‘bounded self-interest’—i.e., they assess the fairness of other parties and reciprocate accordingly, which is different from

unconditional behaviour such as selflessness (Bowles and Gintis, 2000).

The theory of bounded self-interest suggests that individuals assess the behaviour of others against two norms of fairness—namely, distributional and procedural (Bosse and Phillips, 2016). Distributional fairness is concerned with fairness in relation to “the material outcomes for the various parties of a pattern of allocation” (Bosse et al., 2009: 450). Procedural fairness refers to “the perceived fairness of the means used” (Folger and Konovsky, 1989: 115) to make and implement decisions. We focus only on procedural fairness, as this study is about the sub-suppliers’ perception of the way in which intermediaries enforce their sustainability requirements and not about their perception of the distribution of outcomes or rewards related to complying with social sustainability requirements.

The theory of bounded self-interest further suggests that individuals assess the behaviours of others against norms of fairness and engage in either positive or negative reciprocity. Fehr and Gächter (2000: 159) define positive reciprocity as reflecting the tendency that “in response to friendly actions, people are frequently much nicer and much more cooperative than predicted by [the] self-interest model”; and negative reciprocity as involving behaviour such that “in response to hostile actions they are frequently much more nasty and even brutal”. According to Fehr and Gächter (1998), individuals reciprocate positively or negatively in order to preserve the fairness norms even if it incurs costs and sacrifices (Bosse et al., 2009). As Fehr et al. (2002) put it, individuals are prepared “to sacrifice resources for rewarding fair and punishing unfair behaviour even if this is costly and provides neither present nor future material rewards for the reciprocator”. Further, research has suggested that fairness norms are not merely intrinsic; situational or contextual factors such as culture (Li and Cropanzano, 2009) and regulatory focus (Brockner et al., 2008) influence the significance and meaning of fairness or unfairness in a given context.

Few studies in the operations and production management literature have emphasized the importance of the perceptions of fairness for improving the performance of supply chain relationships (e.g., Griffith et al., 2006; Wang et al., 2014). For example, based on a study of 290 supply chain relationships, Griffith et al. (2006) showed that the distributors’ positive procedural and distributive perceptions of fairness of supplier policies enhanced the relationship with their suppliers, decreased conflicts of interests, and increased satisfaction and performance. Based on data collected from 302 Chinese buying firms, Wang et al. (2014) argued that suppliers can mitigate the trust damage caused by their disruptive activities by employing the planned use of fairness approaches, which, in turn, repair trust and strengthen supply chain relationships.

2.3. Framing and fairness perception

A typical decision problem involves analyses of risky and riskless prospects. Possible outcomes of particular choice and the probabilities of these outcomes characterise a risky or a riskless prospect (Kahneman and Tversky, 1979). A risky prospect, however, can be framed either in a positive or a negative manner. According to Levin et al. (1998), presenting an object, event, or outcome in a positive or a negative manner—while holding its objective value constant—can influence an individual’s perception, judgment, and attitude towards that object, event, or outcome. Positive framing highlights gains and negative framing highlights losses (Kahneman and Tversky, 1979; Thaler, 1985). Therefore, when an object, event, or outcome is presented in a positive frame, individuals perceive it more positively than when presented in a negative one.

The power of framing and the positive work it can do has been highlighted in various studies. For example, Levin et al. (1998) found that consumers perceived a beef product labelled “75% lean” more positively than a similar product labelled “25% fat”. Positive framing evokes positive associations in individuals’ memories and causes them to perceive an object, event, or outcome more positively compared to

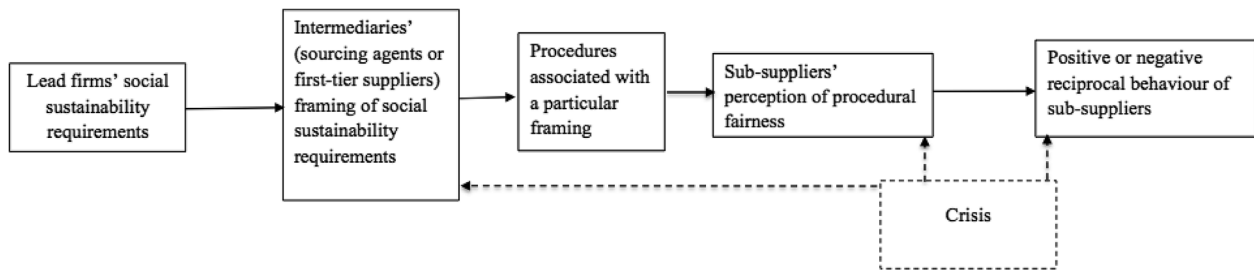


Fig. 1. The conceptual model.

negative framing, which evokes negative associations. Boström (2003), for example, shows how environmental NGOs like Forest Stewardship Council (FSC) use framing to persuade business organisations to engage in concrete actions towards resolving environmental issues. Although numerous business organisations are increasingly showing interest in taking care of the environment, knowledge uncertainty related to environmental issues - caused by a complex mix of factors, spread over space and time and often unperceivable by direct senses - presents them with ample puzzling and contradictory information. Through construction and dissemination of diverse environmental knowledge into a framing that symbolically (e.g. sustainability standards) differentiates risk-winners and risk-losers, environmental NGOs provoke business actors to act (Boström, 2003).

These theoretical constructs can be applied to the context of the sub-supplier perceived procedural fairness of social sustainability requirements, based upon which they need to distribute limited resources to various organizational activities, including implementing the requirements. An application of these constructs will suggest that when social sustainability requirements are presented in a positive frame and are supported by constructive procedures like open communication, then sub-suppliers perceive them to be procedurally fair and reciprocate positively; whereas when social sustainability requirements are presented in a negative frame and are accompanied by unsupportive procedures like absent or limited communication, then sub-suppliers perceive them to be procedurally unfair and reciprocate negatively.

2.4. The effect of crisis on framing and fairness perception

We began the study by adopting a framework based on the above-mentioned theoretical constructs. However, tragic crises took place during our study that enabled us to explore how major events can alter the way that intermediaries frame social sustainability requirements and sub-supplier perceptions of fairness and reciprocity. Within an organizational context, a crisis can be defined as “an event perceived by managers and stakeholders as highly salient, unexpected, and potentially disruptive—can threaten an organization's goals and have profound implications for its relationships with stakeholders” (Bundy et al., 2017: 1662). Research on crisis management suggests that a crisis evokes various negative emotions like sadness, anxiety, anger, and fright (Jin et al., 2012). Hence, those individuals who experience a crisis will present emotional needs or demands that must be taken into consideration during any exchange conducted with them (Kahn et al., 2013; Ulmer, 2001). Any supportive or unsupportive behaviour towards those who are experiencing the crisis have strong effects on their emotions. During a crisis, supportive behaviours evoke positive emotions, while unsupportive ones evoke negative emotions (Kim and Cameron, 2011). These emotional impulses amplify the extant perceptions of fairness—or lack thereof—held towards those who are exhibiting supportive or unsupportive behaviours; these amplified perceptions lead to stronger reciprocal behaviours (Han et al., 2007). For example, Han et al. (2007) demonstrated that, during a crisis, any stimulation of anger will lead to unfair perceptions of the related party. Any emotional instability that emerges during a crisis also drives

individuals to analyse/reanalyse their particular framing of an object, event, or outcome (Coombs, 2007; Kim and Cameron, 2011). These constructs suggest that crises can influence the framing of sustainability requirements enacted by intermediaries, and the subsequent perceptions of fairness and reciprocity held by sub-suppliers.

These discussions open up three important questions. Under what conditions do sub-suppliers perceive social sustainability requirements as procedurally either fair or unfair, and thus reciprocate positively or negatively? How and under what conditions do different framings of social sustainability requirements cause them to be perceived as procedurally either fair or unfair? How do crises influence framing, fairness perceptions, and reciprocity in intermediary-supplier dyads? We present the conceptual framework that will guide our study—derived from our literature review—in Fig. 1.

3. Methods

Research on social sustainability is in its early stages (Huq et al., 2016); we especially know very little about the micro-processes involved in how sub-suppliers in developing countries perceive and respond to the social sustainability requirements of their intermediaries (buying agents or first-tier suppliers), and what micro-level antecedents condition their responses. Hence, we followed the suggestions made by Ketokivi and Choi (2014), and espoused an exploratory approach to theory development. According to Yin (2009), the case study is the preferred method of conducting exploratory research. The unit of analysis, i.e., case, in our research is an intermediary-sub-supplier dyad. Case studies enable researchers to collect significant and rich data on social processes by means of multiple methods—such as interviews, observations, and documents—thus enabling triangulation. Such data enable researchers to perform an in-depth exploration of the complex events, interactions, experiences, and processes occurring across a supply chain (Barratt et al., 2011).

Specifically, we opted for a longitudinal multiple case study research design. The multiple case study method is more suited than the single case approach to develop a rich, reliable, and analytically generalizable theoretical framework (Ellram, 1996). It offers an opportunity to compare and contrast different cases, which improves external validity (Eisenhardt, 1989; Yin, 2009). A longitudinal approach enables more accurate observation of changes occurring in supply chain structures and relationships over time. Like experiments, longitudinal studies are not powerful enough to detect causal relationships, but they are suited to observe the chronological order of events and the phenomena that connect them (Wall and Clegg, 1981).

3.1. Empirical context

We focussed on knitwear garment sub-suppliers operating in the Tirupur exporting cluster in India. The textile and garment product market is notoriously volatile and unpredictable; consequently, Western manufacturers have sought the low-skilled and low-cost segment of the labour market, resulting in a dramatic increase in the volume of textile and garment production being outsourced to developing countries

(Pickles, 2006). According to the Indian Ministry of Textiles (2012), the Tirupur cluster accounts for about 60% of India's total knitwear garment exports. Of this, 55% is exported to Europe (including the UK), 35% to the United States of America, and the remaining 10% to the Middle East, Australia, and South America. The Tirupur Exporters' Association (TEA) estimates that the knitwear cluster comprises over 10,000 production and supporting units. At the same time, the cluster continues to be criticized for occurrences of unethical labour practices. Hence, this context is ideal for this study, as it comprises a large concentration of (mostly small-scale) sub-suppliers to global brands, many of which face constant pressures to comply with various types of sustainability requirements in the midst of resource constraints, heavy competition, lack of capabilities and institutional support, and heightened pressure to meet production parameters (i.e., cost, quality, and time).

3.2. Case selection

Case selection is the most important part of theory building through the case study method (Yin, 2009). Given that the study focuses on the micro-level processes, “the problem is conceptualised at the level of the relationship” between two actors, and the analysis focuses at the “interpersonal or inter-dyadic, providing information about the pattern between individuals or between relationships” (Thompson and Walker, 1982: 890). Therefore, our primary unit of analysis is an intermediary - sub-supplier dyad or the relationship itself. The cases/dyads were selected based on three criteria (Table 1).

Our study is based on 11 intermediary-sub-supplier dyads (with one intermediary connected to two sub-suppliers) that satisfied all these criteria. These dyads are connected through informal spot production order contracts. Because the sub-suppliers units are small, their owners also play the role of managers. They are highly entrepreneurial with relatively limited resources and capabilities; underdeveloped management systems, administrative procedures, and techniques; and a disorganised and informal management style. Wherever possible, we interviewed sustainability officers or social auditors of the lead firms. See Tables 2–4 for the profiles of the sub-suppliers and other stakeholders.

3.3. Data collection

The qualitative data were collected between December 2012 and May 2017, primarily by means of semi-structured interviews, with secondary data collected through informal conversations, observations, and documentary evidence. The interviews helped us “... to gather descriptions of the life-world of the interviewee with respect to the interpretation of the meaning” (Kvale, 1983: 174) of the social sustainability requirements and their responses. We mainly focussed on the first-hand historical accounts of the sub-suppliers' and their

intermediaries' experiences of social sustainability requirements, and of the ways in which they managed them over time. The sub-supplier-intermediary dyads were selected based on their current on-going relationships. Given that multiple dyadic relationships can exist for a sub-supplier or an intermediary, sub-supplier behaviour can be subjected to possible spillover effects due to a) the framing of other current intermediaries and b) the framing of other past intermediaries. We used multiple compartmentalisation strategies to keep the data as unique as possible to the selected dyads. First, we selected the dyads with greater numbers of trade exchanges. Second, we allowed our interview questions to be driven by events unique to a particular dyad. Finally, we interviewed stakeholders relevant to the events described by dyads for confirmation. Also, the process through which we gained access to the intermediaries and the sub-suppliers helped in maintaining the focus.

Additional interviews were conducted with key stakeholders, including trade union leaders, NGO representatives, sustainability officers or social auditors of lead firms, workers, and Tirupur Exporters' Association representatives. In total, 111 interviews were conducted between December 2012 and May 2017 (42 between December 2012 and May 2013, 12 between June 2014 and July 2014, 27 between November 2015 and March 2016, and 30 between March 2017 and May 2017). On average, the interviews lasted between 20 and 60 min, most were recorded in the native language, transcribed verbatim along with background information, and translated into English where necessary. The translations were validated through an objective back translation process aided by a friend of the first author.

To gain a deeper understanding of the sub-suppliers' everyday work practices, their relationships, and their ongoing dialogue with organizational actors and stakeholders, the interviews were supported by data collected through numerous non-participant observations at the sub-suppliers' production facilities. To gain a candid account of events, accounts, beliefs, and aspirations, in addition to the interviews and observations, data was collected through informal conversations with interviewees and non-interviewees held during numerous pre- and post-interview sessions, observations, and feedback sessions. Detailed notes were taken during and after the observations and informal conversations. Further, we reviewed key documents and databases that provided information about the context, labour practices, social sustainability requirements, lead firms, regulatory frameworks, and global supply chain practices in India and similar other contexts.

3.4. Analytic method

We systematically analysed the data using the recommended analytic approach for process research (Langley, 1999). In Table 5, we summarize the data analytic method employed. In Table 6, we show how we operationalised the key constructs for coding purposes.

Table 1
Case selection criteria.

Criteria	Selection	Details
The sub-suppliers must be of similar size, at second-tier level, and located in the same geographical region so that they share similar institutional conditions.	We selected small second-tier sub-suppliers located in Tirupur knitwear cluster. The number of workers in these facilities ranged from 26 to 100.	Access to part of the sub-suppliers was gained through the first author's local networks. Additionally, some intermediaries helped to gain access to their sub-suppliers. The first author is fluent in Tamil (the local language), which enabled him to collect rich data.
The intermediaries must be located in the same location as that of the sub-suppliers. The intermediaries and sub-suppliers are connected through formal spot production order contracts – traditional nature of trade relationships at this level, especially in developing countries.	The intermediaries in our sample are located in Tirupur. The sub-suppliers and intermediaries are connected to each other through spot contracts.	Access to part of the intermediaries was gained through the first author's local networks. Some sub-suppliers helped to gain access to their intermediaries. This also helped us to maintain the focus on dyads during interviews.
The dyads must deal with different types of social sustainability requirements.	For some dyads, certification mechanisms define social sustainability requirements and for others codes define social sustainability requirements.	This is to develop a comprehensive understanding of micro-level dynamics how social sustainability requirements when framed differently invoke different perceptions and behaviours of sub-suppliers.

Table 2
Sub-suppliers' profile.

Sub-suppliers	Registered number of workers (including changes overtime)	Sustainability requirements	Connected intermediaries (i.e. sourcing agents or first-tier suppliers)	Interviewees	December 2012–May 2013	June 2014–July 2014	November 2015–March 2016	March 2017–May 2017
SS1	50–60	Sedex, BSCI	I1	Owner	*		*	*
SS2	72–80	BSCI	I1	Owner	*		*	*
SS3	40–50	BSCI	I2	Owner	*		*	*
SS4	50–75	BSCI	I3	Owner	*		*	*
SS5	90–100	WRAP, BSCI	I4	Owner	*		*	*
SS6	70–75	Codes	I5	Owner	*		*	*
SS7	32–40	Codes	I6	Owner	*		*	*
SS8	26–35	No requirement	I7	Owner	*		*	*
SS9	50–60	Codes	I8	Owner	*			*
SS10	50–60	Codes	I9	Owner	*		*	*
SS11	50–60	Codes	I10	Owner	*		*	*
				Supervisor			* (After closure)	* (After closure)

4. Intermediaries' framing of social sustainability requirements and sub-suppliers' fairness perceptions

Our analysis showed differences in the way in which the intermediaries framed their social sustainability requirements (i.e., working conditions). Some framed them as 'opportunity' to their sub-suppliers: (I2-SS3, I3-SS4, I5-SS6, I6-SS7 and I8-SS9); some as 'insulation' to theirs (I1-SS1 and SS2, I4-SS5, I9-SS10 and I10-SS11); and some 'production-dominant' to theirs (I7-SS8). Below we report the micro-processes i.e. how these framings and associated procedures lead to perceived procedural fairness or unfairness of sub-suppliers (sections 4.1 and 4.2). This will be followed by an analysis of patterns of factors that prompted an intermediary to adopt a particular type of framing and associated procedures (section 4.3). Finally, we show how a particular perception of fairness resulted in specific reciprocity behaviour of sub-suppliers (section 4.4). Also, see [Appendices 1 and 2](#) for more illustrative codes.

4.1. Opportunity framing, procedures and fairness perception

In the opportunity framing, the sustainability requirements were presented as an opportunity to improve the externally- and internally-oriented capabilities required for meeting both current and future market demands. Specifically, they were framed as a way to gain access to more resources, increase productivity, improve worker skills, improve long-term business relationships, gain access to more production orders, increase prices, and, eventually, move up the supply chain. For example, an Intermediary (I2) framed them as follows: *Improving labour practices won't happen in a day. You have to highlight the positives. There is so much they can learn. It disciplines the way they do business. They [SS3] can see a total change.* Another intermediary (I5) said: *They [SS6] learnt everything through experience. They replicate what they learned when they were workers. I have to teach them. I have to tell them [SS6] that compliance is important for the long-term.* The requirements were also presented as an opportunity to gain legitimacy among key local stakeholders, including community and trade associations, as the intermediary (I2) framed: *If they keep their workers happy, they can gain their trust.*

Under such a framing, intermediaries engaged in various procedures to enable sub-suppliers meet their requirements, namely a) engaging in constructive dialogue, b) creating awareness and sharing of knowledge, and c) offering financial incentives. Intermediaries under this framing category engaged in frequent dialogue (ranging from at least once a month to once every four months) with their sub-suppliers and shared knowledge to address any challenges and complexities arising in the process of meeting the requirements. For example, wearing metal gloves is mandatory while working with risk-prone cutting machines, but the workers in a sub-supplier's (SS3) facility ignored their owner's and supervisors' continuous pleas, giving the hot weather as a reason. The sub-supplier reported it to the intermediary owner (I2), who then

consulted his network and ordered his managers to gather ideas on how to improve worker awareness on health and safety issues. The intermediary then shared the ideas gathered, namely compulsory health and safety training programmes and hanging pictures of cutting machine accidents in places where workers congregate, with the sub-supplier. The intermediary (I2) said: *These certification companies basically work in favour of buyers. They do not understand such smaller issues. I have to interfere.*

In another example, on identifying that a sub-supplier (SS7) lacked awareness of labour regulations, the intermediary (I6) arranged for his manager to visit the sub-supplier to create legal awareness. Also, the intermediary shared some of the printed materials with regulations to be displayed around the factory. The intermediary (I6) said: *Not many in this industry know what the labour laws say. My supplier [SS7] was struggling to meet my requirements. I just asked for regulations. I asked my manager to visit his factory to create awareness. After visiting the factory, my manager gave me the idea of sharing the print materials we have.*

Some intermediaries under this framing also offered financial incentives to their sub-suppliers. For example, a sub-supplier (SS9) was employing many temporary contract workers who were employed seasonally for long hours, low wages, and no social security benefits. A major portion of the contract workers in Tirupur comes from North India. When a trade union's protest against employing contract workers hit the media, the intermediary (I8) had to intervene. He offered his sub-supplier a deal that would involve an increase in price if he either reduced the number of contract workers employed or made them permanent. In another example, as one sub-supplier said (SS4): *I needed money to build toilets. I had financial constraints at that time. I visited my bank numerous times. They asked for this document and that document. I shared my frustration with him [I3]; he immediately made a phone call to the bank manager and asked him to help me out.*

Despite knowing that the sustainability requirements of these intermediaries may have some underlying strategic motives, such constructive and considerate procedures led to sub-suppliers perceiving the sustainability requirements as fair. For example, talking about the intermediary's (I3) phone call to the bank manager, sub-supplier said (SS4): *How many out there will be willing to make a phone call to the bank manager for you? Even my relatives won't. It is very rare these days to find such people ... I can say that he [I3] won't ask for unnecessary things.* When issues surfaced, sub-suppliers engaged in dialogue with their intermediaries to reach an understanding, and resolve points of difference. Specifically, they did so in order to clearly understand the expectations of their intermediaries. [Fig. 2](#) depicts these arguments.

4.2. Positive reciprocity

Where sub-suppliers perceived their intermediaries' framing of sustainability requirements and associated procedures as fair, our

Table 3
Intermediaries' profile.

Intermediaries (i.e. sourcing agents or first-tier suppliers)	Connected sub-suppliers	Approximate regional dependency of lead firm on intermediary	Key lead firm region	Interviewees	December 2012–May 2013	June 2014–July 2014	November 2015–March 2016	March 2017–May 2017
I1	SS1 and SS2	70%	North America	Sourcing agent - Owner	*		*	*
I2	SS3	65%	Europe	First-tier supplier - Owner			*	*
I3	SS4	50%	North America	First-tier supplier - Owner			*	*
I4	SS5	40%	United Kingdom	Sourcing agent - Owner		*	*	*
I5	SS6	30%	Europe	Sourcing agent - Owner		*	*	*
I6	SS7	55%	North America	First-tier supplier - Owner	*		*	*
I7	SS8	60%	Europe	Sourcing agent - Owner		*	*	*
I8	SS9	40%	United Kingdom	Sourcing agent - Owner		*	*	*
I9	SS10	75%	Europe	First-tier supplier - Owner		*	*	*
I10	SS11	20%	Europe	Sourcing agent - Owner			*	*

evidence shows that sub-suppliers tended to reciprocate positively. The scope of positive reciprocity was manifested in a number of different ways, ranging from meeting minimum requirements to improving employee relations. For example, with respect to the case of contract workers, the sub-supplier (SS9) positively reciprocated by reducing the number of contract workers, increasing the wages of those who remained and offering them festival bonuses instead of social security. In the labour law example discussed above, the sub-supplier (SS7) reciprocated by displaying all the print materials around the factory and ordering supervisors to learn them. Similarly, in the cutting machine example, SS3 reciprocated by hanging awareness creating accident pictures on the walls of the shop floor and the dining hall.

While the sub-suppliers in this category reciprocated positively by attempting to meet the minimum compliance requirements, there were some occurrences of improvements in employee relations. For example, a sub-supplier (SS7) organized an excursion for his workers to Ooty, a nearby hill station, for having successfully executed a production order. Another sub-supplier (SS6) started inviting his workers to an annual event, called “kada vettu”, that he organizes to thank his family-deity with an animal sacrifice. He said: *Some of them have been with me for very long time. This is the day I thank them. They come to the “kada vettu” like a family. Eat well and bless me.* These activities eventually increased workers' morale, as one of his workers said: *... I feel good about working for my owner.* While numerous unobserved factors could have contributed to these differences in positive reciprocity, including sub-suppliers' personal attributes and resource availability, our evidence strongly suggests that mutually respectful and understanding relationships within dyads tends to generate more reciprocal relationships involving greater attention to social sustainability requirements.

4.3. Insulation framing, procedures and fairness perception

In the insulation framing, the social sustainability requirements were presented to the sub-suppliers as a risk aversion mechanism. Specifically, they were presented as a shield against negative stakeholder reactions, as one intermediary (I1) said: *My buyer is afraid of any exposure. So, I'm very careful.*

Under such a framing, intermediaries engaged in various procedures, namely a) engaging in limited dialogue and knowledge sharing, and b) adoption of a threatening attitude. The interactions between sub-suppliers and intermediaries were less frequent (ranging from once to three times per year) than they were under the opportunity framing. For example, in the case of sub-supplier SS5 in the insulation framing, the intermediary visited the factory once or twice per year. His managers visited to drop and collect orders, or the sub-supplier himself was asked to visit the intermediary's office to collect and drop orders.

Very little ad-hoc knowledge sharing related to improving working conditions occurred, as one sub-supplier (SS5) said: *We have not spoken a lot about working conditions. My job is to process the orders. As far as I do that, they [I4] are happy.* The sub-suppliers are not given a platform to raise their concerns (or their concerns were disregarded) about the complexities arising in the process of meeting the sustainability requirements. For example, sub-suppliers are required to maintain 9 h a day and 48 h a week working time limits. On exceeding these limits, a worker is entitled to overtime payment of double the ordinary rate of wages. Although a worker can work overtime, the total number of weekly working hours, including overtime, should not exceed 60 h. When sub-supplier (SS11) could not maintain these working hours during peak seasons, he approached his intermediary (I10) for advice. He was told that he had to maintain it by whatever means possible, as the sub-supplier said: *Nothing. I had to manage it myself.*

Some intermediaries used threat as a mechanism to make their sub-suppliers meet the requirements, as one intermediary (I9) said: *I do not want to lose my business. He [SS10] does not want to lose his business either.* For example, sub-supplier (SS11), on realizing the likelihood of a delay in the delivery of orders, reached out to his intermediary (I10) for

Table 4
Stakeholders' profile and number of interviews.

Stakeholders	December 2012–May 2013	June 2014–July 2014	November 2015–March 2016	March 2017–May 2017
Workers (W)	25	–	5	7
Social auditors/sustainability officers of lead firms (SA)	1	6	2	–
Trade union leaders (TU)	2	–	–	–
NGO representatives (NR)	1	2	–	1
Tirupur export association representatives (ER)	–	–	–	2

an extension. The intermediary rejected the request and threatened the sub-supplier with financial penalties and termination of future relationship, as the sub-supplier said: *There was a delay in the dying process. So, automatically there was a delay in processing the order. He [I10] knows these things happen. But, he was not ready to listen. He was angry. He said if I do not process the orders on time, he will reduce the payment and stop giving me orders.*

Such inconsiderate and hostile procedures from intermediaries led to sub-suppliers perceiving the sustainability requirements as unfair. For example, one sub-supplier (SS2) said: *Their [his intermediary] first priority is to protect themselves.* In the above working hours example, the sub-supplier (SS11) said: *They [his intermediary] know how peak seasons are. To maintain good relationship with their customers, they [I10] pressurize us. We are scapegoats for them.* Fig. 3 depicts these arguments.

4.4. Negative reciprocity

When sub-suppliers perceived their intermediaries' framing of sustainability requirements and associated procedures as unfair, they reciprocated negatively. Our evidence shows that the negative reciprocity was manifested in the form of distrust or hostility and deception. Because of lack of support and insensitivity, a sense of hostility existed among these sub-suppliers. When asked about the relationship, one sub-supplier (SS11) frustratingly said: *... respect is very important. If you [I10] respect me, I respect you. If you trust me, I trust you. If you are a businessman, I'm a businessman too.*

To preserve their business, they engaged in unethical or illegal activities, including making workers work overtime for no extra pay,

paying low salaries, producing false records, employing high numbers of contract workers, not covering social security benefits, and not providing proper toilet facilities (as observed by the first author). In the working hours example mentioned above, one worker from SS11's factory said: *We work 12-h shifts. Close to the delivery deadline, we work more. The owner gets us coffee, tea and snacks ... We do not get extra pay.* In order to evade legal actions, double records were used to log falsified working hours, wages, and social security payments, and were used to manipulate labour inspectors and social auditors. For example, a sub-supplier (SS1) said: *The conversion value is in dollars and the margin is very low. I normally get less than a dollar per finished garment. I can get a higher margin [meaning profit] only if I do more business ... This is my only source of income. I didn't have any other choice. I had to do double records to give them what they need.*

Also, some sub-suppliers bribed government authorities to obtain their authorization, and since corruption is prevalent in Tirupur, it was easy for sub-suppliers to manipulate government authorities in order to achieve apparent compliance with the requirements of social sustainability requirements. There were also instances where workers were coerced into being complicit with non-compliance. Sub-suppliers used their authority by ordering their workers to act according to their directives. In cases of resistive workers, they terminated their employment, as one worker of the sub-supplier (SS10) said: *I didn't agree with my [previous] owner. He was afraid that that I may speak up during the audits. Then one day he asked me to leave the company.*

Table 5
Data analytic method.

Stage	Process
1	A case in our research is an intermediary-sub-supplier dyad. Therefore, for meaningful comparisons, we separately grouped data based on intermediary-supplier dyads. This enabled us to create unique narratives for each dyad.
2	a) We iteratively analysed the interview data related to each intermediary-supplier dyad to develop a chronological account of key incidents that sub-supplier and intermediaries encountered related to social sustainability requirements. b) We added context to these narratives using data collected using other methods and from other actors. This helped us to trace the sequence of events and to understand the contextual nuances around the events.
3	We followed a systematic coding process recommended for qualitative data (Strauss and Corbin, 1990). a) Using manual colour coding method, we began the data analysis process with inductive open coding of interviews to help in data reduction. Rather than imposing an existing typology or taxonomy onto our data, we pursued an open search for categories. This inductive categorization process resulted in broad themes such as sub-suppliers' and intermediaries' interpretations of social sustainability requirements, the practices they adopted to cope with them, motivations, challenges and outcomes. Properties of these broad themes were also identified and labelled for further analysis. b) Axial coding followed the open coding process to link and re-group inductively generated open codes into meaningful abstract codes. Additionally, in this stage, via a combination of inductive and deductive thinking, we began to relate the axial codes to the adopted theoretical constructs, namely framing, associated procedures fairness perception or reciprocal behaviour, and defined and labelled emerging new constructs (see Table 6 for the operationalisation of these constructs). c) Each dyad was coded individually using the process described above. d) We discussed the resultant themes among ourselves, and any confusions and inconsistencies were rectified through constant discussions.
4	The intra-dyad analysis was followed by inter-dyad analysis. This helped us to understand the influence of different types of intermediaries' framing on perceptions of fairness and reciprocity among sub-suppliers.
5	To strengthen the reliability and validity of the emergent constructs we engaged in the following activities (Braun and Clarke, 2006; Miles and Huberman, 1994): a) Patton (2002) criteria for internal homogeneity and external heterogeneity were used to test if the final themes or categories that emerged out of our coding process were supported by coherent data and that there was a clear distinction between themes/categories. Internal homogeneity was achieved by re-reading of the themes several times to check for coherence in coded data and unique codes were moved to an appropriate theme or removed. External homogeneity was achieved by re-reading the all emergent categories to check for their distinctiveness. b) We iteratively consulted the narratives, transcripts, codes and literature. c) The data from other sources were consulted to check the validity of the findings. d) We discussed our findings with some stakeholders. e) We discussed the emergent constructs and framework multiple times among ourselves and with our peers to ascertain the robustness of our findings.

Table 6
Operationalisation of key constructs.

Constructs	Operationalisation
Opportunity framing	Intermediaries' framing of social sustainability as an opportunity to develop.
Insulation framing	Intermediaries' framing of social sustainability as a mechanism to avert risk.
Production-dominant framing	Intermediaries' framing of social sustainability requirements as irrelevant to risk aversion or development.
Procedures	A range of activities that intermediaries under each framing engage in with their sub-suppliers related to social sustainability requirements.
Perceived procedural fairness	Sub-suppliers conceptualising their intermediaries' procedures related to social sustainable requirements as sensible, just, reasonable and realistic.
Perceived procedural unfairness	Sub-suppliers conceptualising their intermediaries' procedures related to social sustainable requirements as insensible, unjust, unreasonable and unrealistic.
Positive reciprocity	Sub-suppliers' cooperative activities in response to their intermediaries' social sustainability requirements.
Negative reciprocity	Sub-suppliers' uncooperative activities in response to their intermediaries' social sustainability requirements.

4.5. Production-dominant framing, procedures and fairness perception

In the production-dominant framing, no social sustainability requirements were presented. One intermediary - sub-supplier dyad (I7-SS8) fell into this category. Clearly, the relationship that existed between the sub-supplier and his intermediary was an ad-hoc one. The intermediary had visited the factory only once before the first order was placed. Since then, the sub-supplier had visited the intermediary to procure and deliver production orders. This factory was the worst among those visited during the fieldwork. It did not have the necessary ventilation and lighting and the employees were working with their shirts off. Most of the workers were contracted for low wages and no social security benefits. Because no demands had been made upon the sub-supplier to meet any sustainability requirements and the focus was only on processing the production orders, the sub-supplier perceived this state of affairs positively and reciprocated positively by attempting to meet the production order requirements. The dyad (I7-SS8) could persist, as they are not on the lead firms' radar. They are what we refer to as the "hidden hands" in the making of garments. Fig. 4 depicts these arguments.

4.6. Factors influencing intermediaries' framing of social sustainability requirements

Although various factors, at different levels of analysis, could potentially influence the framings enacted by intermediaries, we focussed on the micro-level processes relating to how participants in dyadic relationships thought about and responded to social sustainability requirements. Accordingly, our case research demonstrates the influence of one micro-level factor: the ways in which lead firms impose their sustainability requirements on intermediaries. The intermediaries in our sample supplied two types of lead firms. For some of our sample intermediaries (I1, I2, I3, I4), the lead firms were well-known brands and retailers located in the USA and Europe (including the UK); for others (I5, I6, I7, I8, I9, I10), the lead firms were lesser-known brands and retailers in Europe (including the UK).

Large well-known brands face more stakeholder scrutiny than lesser-known ones. Consequently, their survival depends on showing stakeholders that they are aware of the factory conditions under which their products are manufactured and on offering evidence-based information pertaining to their rigorous monitoring of their supply

chains. Given that their own codes and audits lacked legitimacy among their sensitive stakeholder groups, the large well-known brands in our sample resorted to third-party sustainability certification programmes. The certification programmes commonly adopted by Tirupur suppliers were SA 8000, BSCI, Sedex, and WRAP. On the other hand, the lesser-known brands directed most of their efforts towards reducing production costs, rather than towards improving their social or environmental performance. As certification mechanisms did not help the cost effectiveness of these lead firms, they used their own codes to manage working conditions in their supply chains. To a great extent, they relied on their intermediaries for monitoring and implementation purposes.

By adopting such measures, both types of lead firms shifted part of their responsibilities to intermediaries (i.e., first-tier suppliers or sourcing agents), which were expected to play double-agency (Wilhelm et al., 2016) or boundary-spanning roles (Soundararajan et al., 2018), ascertaining that the sub-supplier networks under their control complied with lead firm expectations in terms of working conditions. The ways in which the lead firms shifted their responsibilities in part influenced the type of framing adopted by their intermediaries towards social sustainability requirements. Supporting this, one intermediary who had adopted the opportunity framing (I2) said, *I learnt from my buyer [his lead firm].* Another intermediary, who had adopted the insulation framing, (I9) said, *They put too much pressure on me. When you ask for support, they will negotiate like they are so poor ... Of course I have to shift the pressure on my suppliers. How much can I handle?*

This was also confirmed by the interviews conducted with other stakeholders. For example, when asked about the relationship between lead firms and intermediaries with respect to social sustainability, a trade union leader said: *We also understand how these buyers are. That is why we don't always blame the owners. You help them, they help others. You put pressure on them; they put pressure on their suppliers. It is very simple.* There could be more factors in play such as past experiences with sub-suppliers and dependency on sub-suppliers, thus calling for further research.

5. Crisis, frame maintenance and frame shift

The cluster faced the aftershocks of the Rana Plaza disaster, which spilled over into Tirupur through the lead firms during late 2013. As the lead firms faced increased stakeholder scrutiny, they exerted more pressure on their intermediaries to improve working conditions.

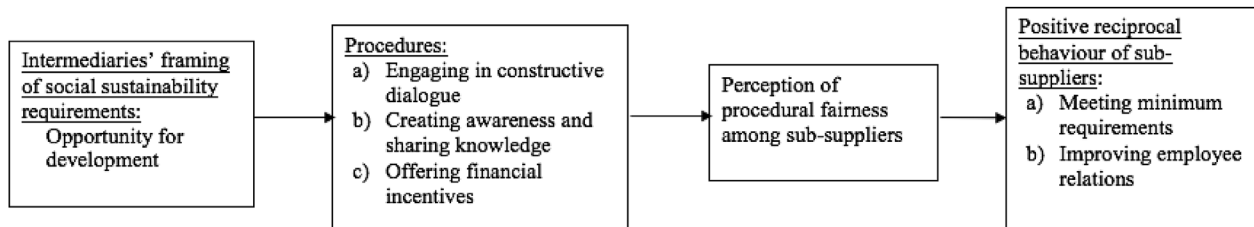


Fig. 2. Opportunity framing, procedures, fairness perception and reciprocity.

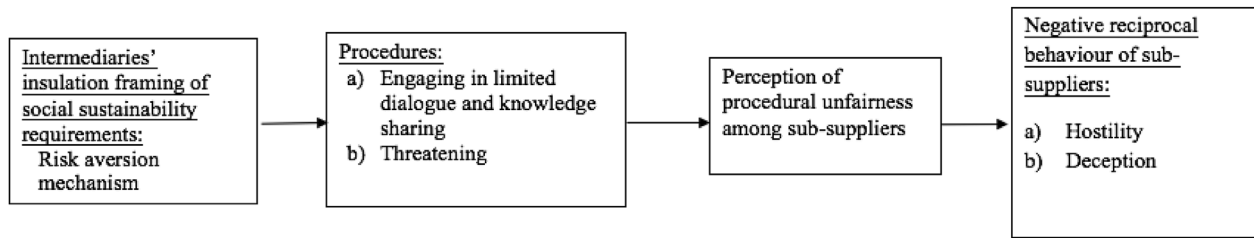


Fig. 3. Insulation framing, procedures, fairness perception and reciprocity.

Coincidentally, a shortage of electrical power that occurred at roughly the same time. Between 2014 and 2015, Tirupur faced six to 8 h of power cuts per day, which seriously threatened the cluster's survival. Those most affected were the sub-suppliers for whom it was not cost effective to equip their factories with Uninterruptible Power Supply (UPS) systems or diesel generators. As a result, the overall production capacity of the cluster decreased. Due to decrease in work, workers began to leave Tirupur creating severe labour scarcity. During the crisis, some intermediaries maintained their framing of sustainability requirements and some shifted, which then influenced their sub-suppliers' perception of fairness and reciprocity. Below we discuss these dynamics (Also see Fig. 5).

5.1. Crisis and frame maintenance

While, in general, the intermediaries sourcing from Tirupur struggled to process their orders and meet their delivery deadlines, the intermediary – sub-supplier dyads (I2-SS3, I3-SS4, I6-SS7, and I8-SS9) coordinated effectively to survive the crisis. Due to positive previous engagements, these intermediaries—who had adopted the opportunity framing—were more forthcoming in helping their sub-suppliers during the crisis. The perceptions of fairness held by the sub-suppliers enabled the engagement in constructive dialogue—an essential condition for crisis survival (Ulmer 2001)—until ways or mechanisms could be found to survive the crisis. For example, one intermediary (I2) said: *No one could run the factory at full capacity. We were begging the Tamil Nadu government to sort it out ... There was a huge demand for UPS [Uninterruptible Power Supply] and generators. So, they were very expensive. He [SS3] definitely needed some support to install them.* When asked about it, his sub-supplier (SS3) responded: *I did not know what to do. I was thinking of leaving this business. Brother [referring to his intermediary] gave me money to install UPS. He said 'No hurry, pay me back gradually'.*

With respect to those cases in which intermediaries maintained the opportunity framing and continued to engage in constructive procedures, the perceptions of fairness held by sub-suppliers were amplified. For example, one sub-supplier (SS9) said: *You should stay faithful to ones who offer water when you are dying of thirst.* In another example, sub-supplier (SS3), who was attempting to meet only the minimum requirements, begun to reciprocate more positively by implementing more worker-friendly measures to improve employee relations. He said: *I learned many small, small things. The fans in the factory floor were not giving enough air. Workers were sweating, especially in the peak summer. I installed more fans. I know this is not going to give me a price rise.*

On the other hand, some intermediaries maintained the insulation framing with their sub-suppliers even during the crisis (I4-SS5, I9-SS10 and I10-SS11). This, and its related procedures, did not enable the effective coordination between those intermediaries and their sub-suppliers during the crisis. Also, the fact that those intermediaries maintained the insulation framing increased hostility between them and their sub-suppliers, leading to negative reciprocity. One sub-supplier (SS5) said: *I could not even get him [I4] on the phone. He was always busy. I have friends and family who helped me. Think about people who could not get any help ... What to do. The world is full of selfish people and we have to live among them.* In another example, when a sub-supplier (SS11) faced the severe financial need to pay back a bank loan he had secured to operate the factory, he did not receive any help from his intermediary (I10). As a result, he had to close his factory in 2015 and sell both the building and equipment.

5.2. Crisis and frame shift

Our longitudinal analysis showed how, over time, two intermediaries shifted the way in which they framed the sustainability requirements to their sub-suppliers either a) from insulation to opportunity (I1-SS1 and SS2) or b) from opportunity to insulation (I5–SS6). Below, we show these shifts and the factors that triggered them. See Tables 7–9 for a summary of the framing before, during, and after the crisis.

On realizing the problems that the insulation framing can create, especially during a crisis situation, one intermediary (I1) shifted his framing from insulation to opportunity over time. In a recent interview, intermediary I1 said: *I could see that they [SS1 and SS2] did not trust me. I knew that they were lying to me. I have been in this business for some time and I can sense who is lying and who is not. Not good. Not good. I had to change my approach to make them listen to me. Things are much better now. At least they do not lie anymore, which is a good start.*

When asked about the current perception about the intermediary (I1), his sub-supplier (SS1) said: *The power cut issue was very serious. People were losing business. Workers were leaving. It was hard to retain workers. They were losing confidence. We had to keep aside our differences if we were to survive. We spoke a lot about these issues. He gave me a lot of ideas about power maintenance ... We are in a much, much better place now. We speak about workers, about business, politics, family.* This was also confirmed by another sub-supplier of I1 (SS2): *I don't know what happened. Brother [referring to his intermediary] has changed a lot. Earlier we cannot even sit and talk for 5 min. Now, he talks for hours [laughing].*

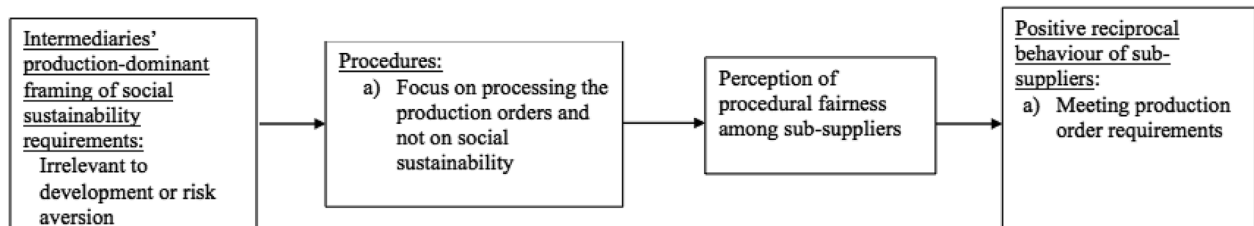


Fig. 4. Production-dominant framing, procedures, fairness perception and reciprocity.

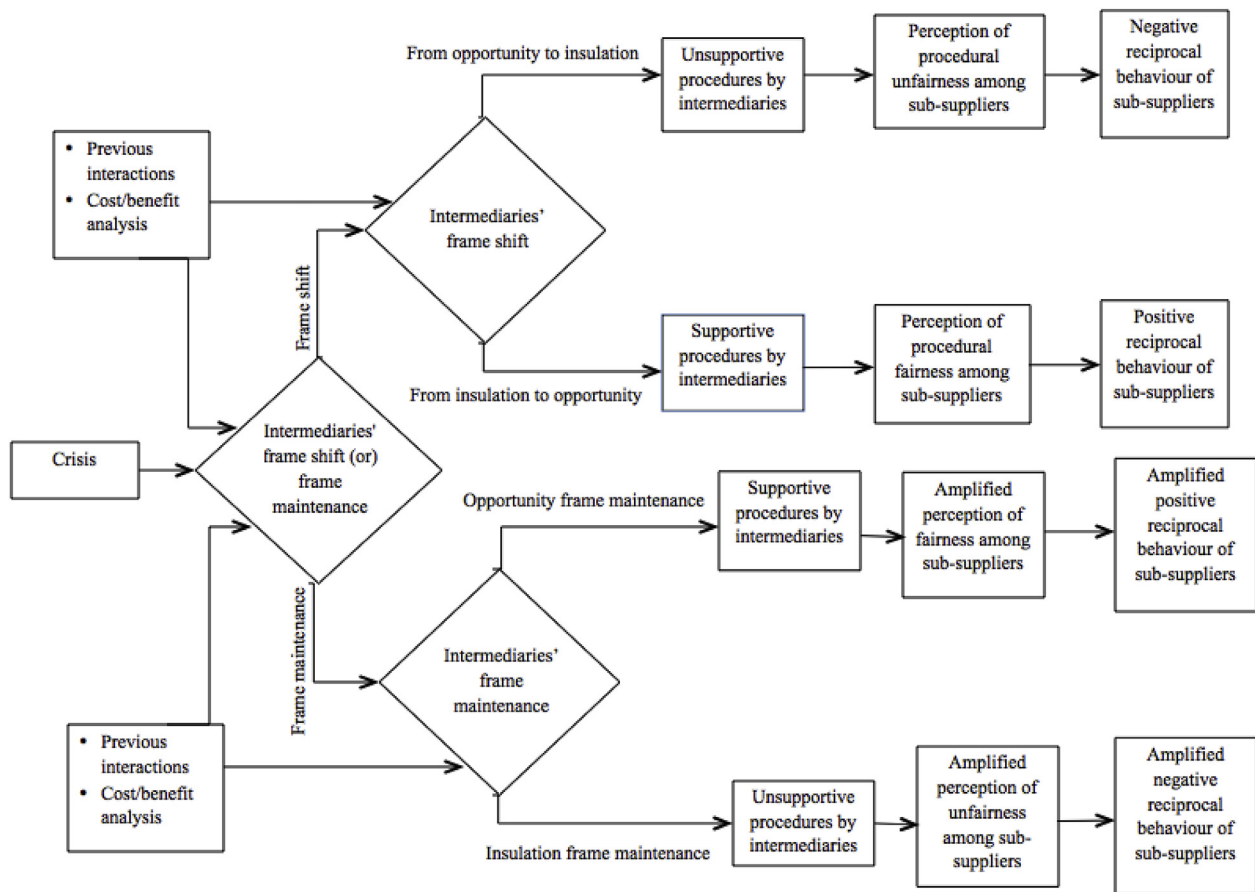


Fig. 5. Crisis, frame maintenance and frame shift.

Both sub-suppliers reciprocated positively by improving the conditions of their factories. During recent visits to their factories, visible changes were observed—e.g., improved ventilation and lighting, change of flooring, worker awareness posters on the walls, and better toilets. Confirming the changes, a worker from SS1 said: *We recently formed many committees. Harassment committee. Health and safety committee. Fire safety committee ... I think my owner wants to grow.*

Although the government eventually solved the power crisis in 2016, the shocks created by it and by the increases in electricity tariffs continued to haunt the cluster. Recent fieldwork has shown that the crisis was on the verge of being resolved and that business was getting better in Tirupur. Even after the crisis was over, intermediary I1 maintained the opportunity framing of sustainability requirements. Similarly, his sub-suppliers (SS1 and SS2) also held their perceptions and reciprocal behaviours after the end of the crisis. Opportunity framing and its associated constructive procedures increased the intermediaries' and sub-suppliers' familiarity with the benefits that could follow. When asked about it, sub-supplier SS1 said: *A lot has changed in my factory. My workers respect me more. They are happy. I'm happy. Why would someone go back? Similarly, during a recent interview, sub-supplier SS2 exhibited increased familiarity with the benefits of social*

sustainability requirements, He said: *I like my factory now. This is how I have to move to the next level.*

A frame shift from opportunity to insulation in the wake of the crisis was also observed in the case of intermediary I5, whose immediate reaction to the crisis had been to protect his business. So, he began to shift from opportunity to insulation framing and adopted an attitude of intimidation towards his sub-supplier (SS6), as the latter said: *We are all struggling. If he [I5] put pressure on me, what can I do?* The intermediary's change of framing influenced his sub-supplier's perception of fairness and reciprocal behaviour, which became hostile. The latter said: *He was not like this before. I do not know if he is under pressure. But, he is not like before. I think he lost a lot of money during the electricity problem. I don't know. I had problems too. But I'm the same. Do you see any changes in me? [laughing].*

However, a recent interview with sub-supplier SS6, conducted after the crisis was over, shows that the intermediary had moved back to opportunity framing. Our research shows that financial pressure played an important role in the intermediary's initial shift to insulation. The sub-supplier's perception of fairness also shifted back; he said: *He was under a lot of financial pressure. He did not want to lose his business. Now, he is all right. He felt bad about his actions. Now business is as usual.*

Table 7


Initial framing of intermediaries, and perception of fairness and reciprocity of sub-suppliers.

Opportunity framing, fair perception and positive reciprocity associated with the opportunity framing	Insulation framing, unfair perception and negative reciprocity associated with the insulation framing	Production-dominant framing, fair perception and positive reciprocity associated with the production-dominant framing
I2-SS3, I3-SS4, I5-SS6, I6-SS7, I8-SS9	I1-SS1 and SS2, I4-SS5, I9-SS10, I10-SS11	I7-SS8

Table 8

Intermediaries' framing during the crisis, and perception of fairness and reciprocity of sub-suppliers.

Opportunity framing, fair perception and positive reciprocity associated with the opportunity framing	Insulation framing, unfair perception and negative reciprocity associated with the insulation framing	Production-dominant framing, fair perception and positive reciprocity associated with the production-dominant framing
I1-SS1 and SS2, I2-SS3, I3-SS4, I6-SS7, I8-SS9	I4-SS5, I5-SS6, I9-SS10, I10-SS11	I7-SS8

 Denotes frame shifts

On querying this, the intermediary (I5) highlighted the influence of familiarity with the benefits on his change of framing: *The power problem increased my BP [Blood Pressure]. My customers [referring to the lead firms] were not very concerned. They said we can't compromise on labour. So, I showed it on him. Poor guy. It did not help us to move forward though ... I have made a promise to him that he will get all necessary support as usual to develop and stay in business.*

6. Discussion

Our research demonstrates how the different framings of sustainability requirements adopted by intermediaries (i.e. opportunity, insulation, and production-dominant) and their associated procedures can elicit different perceptions of fairness (i.e., fair or unfair) in sub-suppliers, and how such different perceptions can give rise to the latter adopting different types of reciprocal behaviours (i.e., positive or negative). The longitudinal nature of our study also enabled us to evaluate how a crisis can affect the intermediaries' framings and the consequent perceptions and behaviours of their sub-suppliers. In the following sections, we discuss the findings that emerged from our inductive study in detail and offer propositions that open a platform for further theoretical and empirical advancements in the field of sustainable supply chains in general.

6.1. The framing of social sustainability requirements, perceptions of fairness, and reciprocity

Our findings show that intermediaries frame social sustainability requirements as opportunity, insulation, or production-dominant. Under each type of framing, intermediaries engage in various procedures. Each of these types of framing and their associated procedures influence the perceptions of the fairness of social sustainability requirements held by sub-suppliers. Under opportunity framing, intermediaries engage in constructive dialogue, creation of awareness, and sharing of knowledge, and offer financial incentives. Opportunity framing and its associated procedures emphasize benefits to sub-suppliers. Whenever individuals seek to make decisions, they perceive any gains as fair (Kimes and Wirtz, 2003), and perceptions of fairness lead to positive reciprocity (Bosse et al., 2009). Accordingly, when intermediaries frame social sustainability requirements as opportunity and

engage in various procedures that are perceived as fair by sub-suppliers, the latter reciprocate positively by engaging in activities that range from meeting minimum requirements to improving employee relations. Therefore, we propose the following:

P1a. *The framing of social sustainability requirements as opportunities by intermediaries and the associated supportive procedures are more likely to lead to perceptions of fairness and positive reciprocity by sub-suppliers.*

Under an insulation framing, intermediaries engage in limited dialogue and sharing of knowledge, and adopt threatening attitudes. Insulation framing and its associated procedures emphasize losses. Whenever individuals seek to make decisions, they perceive any losses as unfair (Kimes and Wirtz, 2003), and perceptions of unfairness lead to negative reciprocity (Bosse et al., 2009). Accordingly, when intermediaries frame social sustainability requirements as insulation and engage in various procedures that are perceived as unfair by sub-suppliers, the latter reciprocate negatively by demonstrating hostility and engaging in deceptive activities. These arguments lead to the following proposition:

P1b. *The framing of social sustainability requirements as insulation by intermediaries and the associated unsupportive procedures are more likely to lead to perceptions of unfairness and negative reciprocity by sub-suppliers.*

Under the production-dominant framing, intermediaries do not require sub-suppliers to comply with any social sustainability requirements. Their only requirement is the production of high quality garments on time. This causes sub-suppliers to develop positive perceptions and an associated positive reciprocity only related to processing production orders. Thus, we propose the following:


P1c. *The production-dominant framing and the associated procedures of intermediaries are more likely to lead to perceptions of fairness and positive reciprocity by sub-suppliers in relation only to processing production orders.*

In general, opportunity framing enables intermediaries and sub-suppliers to interact more freely than insulation framing does. Opportunity framing improves trust and opens doors for frequent interactions and the sharing of knowledge—be it to attain minimum compliance or to progress beyond it. Both parties benefit from such interactions. Intermediaries can successfully perform their double-agency or boundary-spanner roles, while sub-suppliers can stay in

Table 9

Intermediaries' framing after the crisis, and perception of fairness and reciprocity of sub-suppliers.

Opportunity framing, fair perception and positive reciprocity associated with the opportunity framing	Insulation framing, unfair perception and negative reciprocity associated with the insulation framing	Production-dominant framing, fair perception and positive reciprocity associated with the production-dominant framing
I1-SS1 and SS2, I2-SS3, I3-SS4, I5-SS6, I6-SS7, I8-SS9	I4-SS5, I9-SS10, I10-SS11	I7-SS8

 Denotes frame shifts

business. Trust is important in solving relationally-oriented inter-organizational problems (Heide and John, 1992). Research has shown that trust between supply chain partners leads to long-term supply chain relationships by enabling better communication and information sharing (Wang et al., 2014). It prevents supply chain partners from acting opportunistically even if it involves gaining short-term benefits (Johnston et al., 2004). In contrast, insulation framing leads to hostile relationships characterized by lack of trust and interactions. It creates conditions in which intermediaries need to spend their time and energy on assessing the integrity, trustworthiness, and reliability of sub-suppliers instead of on collaborative efforts. Therefore, we propose:

P1d. *Opportunity framing of social sustainability requirements is more likely than insulation framing to lead to better relationships and to the sharing of knowledge between intermediaries and sub-suppliers.*

6.2. Crises and the framing of sustainability requirements

According to Kim and Cameron (2011), the occurrence of crises disturbs an individual's present framing. Crises create conditions in which individuals evaluate the costs-benefits linked to the adoption of a type of framing and modify it if necessary (Coombs, 2007). Accordingly, our findings show that, during a crisis, some intermediaries maintained their choice of framing while others shifted theirs. With regards to frame maintenance, some intermediaries maintained opportunity framing. They continued to engage in supportive procedures, such as offering financial support and sharing knowledge to help their suppliers survive the crisis. This further amplified the perceptions of fairness held by their sub-suppliers, eventually fostering positive reciprocal behaviours on their part.

On the other hand, some intermediaries maintained insulation framing even during a crisis. They continued to engage in unsupportive procedures such as threats. As sub-suppliers are usually resource-deprived (Lund-Thomsen and Nadvi, 2010; Lund-Thomsen and Lindgreen, 2014), they expected increased support from their intermediaries during a crisis. As this did not happen, therefore, insulation framing and unsupportive procedures amplified the perceptions of unfairness held by sub-suppliers, eventually resulting in increased negative reciprocal behaviours.

A similar observation can be found in the crisis management literature (Kim and Cameron, 2011). For example, Kim and Cameron (2011) argued that a crisis influences the emotions of those individuals who experience it; these, in turn, influence their perceptions of and behaviours towards others. During a crisis, opportunity framing elicits positive emotions (i.e., happiness), while insulation framing prompts negative ones (i.e., sadness), affecting how sub-suppliers reciprocate. Drawing on these arguments, we propose:

P2a. *The maintenance, by intermediaries, of an opportunity framing of social sustainability requirements and of its associated supportive procedures even during a crisis is more likely to amplify perceptions of fairness and positive reciprocity in sub-suppliers.*

P2b. *The maintenance, by intermediaries, of an insulation framing of social sustainability requirements and of its associated unsupportive procedures even during a crisis is more likely to amplify perceptions of unfairness and negative reciprocity in sub-suppliers.*

With regard to shifts in framing types, the research shows that these enable individuals to experience the costs and benefits of the other option (Scheufele and Tewksbury, 2006). They enable them to identify and benchmark the most appropriate framing and make constant comparisons (Royal, 2008). The operational benefits of adopting opportunity framing and of its associated procedures include an increased social sustainability performance of supply chains, improved relationships with sub-suppliers, the development of the social management capabilities (Huq et al., 2016) of sub-suppliers, and effective crisis

management. Conversely, insulation framing and its associated procedures lead to a reduced social sustainability performance of supply chains, hostile relationships with sub-suppliers, and ineffective crisis management. During the crisis, intermediary I1 shifted his adopted framing from insulation to opportunity; however, on realizing the benefits of adopting opportunity framing, he maintained such framing even after the crisis had ended. Furthermore, his sub-suppliers also maintained their positive reciprocal behaviour after the end of the crisis.

Conversely, in the case of intermediary I5, the shift from opportunity to insulation framing was only temporary. After the crisis was over, he shifted back to opportunity framing. His experience with the benefits of opportunity framing acted as a benchmark for constant comparisons, which eventually prompted him to shift back to it. Others, who had adopted insulation framing, had no benchmarks for comparison and therefore maintained it both during and after the crisis. These arguments lead to our final proposition:

P2c. *Those intermediaries who can compare the operational outcomes/benefits of the opportunity and insulation framing of social sustainability requirements and their associated procedures are more likely to maintain opportunity framing or to shift back from insulation to opportunity framing.*

7. Conclusion

The lack of information and the absence of direct control intensify the challenges faced by lead firms in managing social sustainability in multi-tier global supply chains beyond first-tier suppliers—the hotspots for unsustainable conduct (Grimm et al., 2016; Wilhelm et al., 2016). The realisation of the complexities associated with the direct management of the social sustainability practices adopted by sub-suppliers has led lead firms to transferring their responsibilities to intermediaries, such as first-tier suppliers and sourcing agents. However, research has just begun to the scratch the surface of the relationship between intermediaries and sub-suppliers with respect to the management of supply chain sustainability (e.g., Soundararajan et al., 2018; Wilhelm et al., 2016). Our study complements these studies by shedding light on the ‘micro-level behavioural processes’ (Staw and Sutton, 2000) involved in the exchanges between sub-suppliers and intermediaries with respect to social sustainability.

Using an in-depth longitudinal study of intermediary-sub-supplier dyads operating in the South Indian garment industry, we show that the framing of social sustainability requirements by intermediaries and their associated procedures play an important role in influencing sub-supplier perceptions of procedural fairness, which, in turn, influence their reciprocal behaviours.

Further, the longitudinal nature of this study enabled us to capture the influence of a crisis that serendipitously emerged within its context and time frame. The findings show that a crisis does not have equal influence on the micro-processes. Some intermediaries maintain their framing types while others shift theirs. Framing maintenance amplifies the perceptions of fairness and the reciprocal behaviours associated with a particular framing type. Maintaining the opportunity framing amplifies the perceptions of fairness and the positive reciprocity in sub-suppliers. Correspondently, maintaining the insulation framing amplifies the perceptions of unfairness and the negative reciprocity in sub-suppliers. Frame shifts enable the intermediary – sub-supplier dyads to experience the other option, analyse the cost-benefits ratios linked to different framings, and either shift back or maintain accordingly.

7.1. Theoretical implications

Our study makes four significant contributions to different strands of literature. First, our longitudinal inductive study empirically grounds the processual and dynamic ways in which developing country sub-suppliers respond to the social sustainability requirements imposed by

their intermediaries. The adoption of a micro-level lens shows the importance of intermediaries' framing in triggering different types of procedural fairness perceptions and reciprocity in developing country sub-suppliers. Although located in similarly challenging contexts for the management of social sustainability demands, not all sub-suppliers engaged in opportunistic or deceptive activities in the pursuit of self-interest, thus confirming the arguments of the bounded self-interest model (Bosse et al., 2009). Instead, their perceptions of fairness and consequent actions were conditioned by how the sustainability requirements were framed and procedures associated with them. The novel contribution of the study is the influence of framing of social sustainability requirements on sub-supplier behaviours. We do not however argue that the content of sustainability requirements is unimportant. The findings show that even well designed social sustainability mechanisms can lead to unfair perception and negative reciprocity of sub-suppliers if framed as insulation.

Second, our longitudinal methodology enabled us to study the framing maintenance and framing shift induced by crises situations. The wider industry-level social shocks (Huq et al., 2016) sparked by the Rana Plaza incident and a local power supply crisis elevated the gains of the opportunity framing and the losses of the insulation one. On realizing the gains and losses, one intermediary in the insulation framing shifted to the opportunity framing and maintained the framing. This finding is in line with the preference reversal construct in prospect theory (Tversky et al., 1990), which suggests that, when considering gains, individuals tend to minimize risks by exhibiting risk-aversion behaviours. In contrast, when considering losses, individuals tend to reduce or eliminate them by exhibiting risk-seeking behaviours, even when the costs are high (Tversky et al., 1990). Our findings expand these arguments by demonstrating the contingency effects of the cost/benefit comparison on frame maintenance.

Our findings also confirm the importance of managing positive stakeholder relationships pre-crisis so that an effective coordination emerges during a crisis (Ulmer, 2001). In addition, our findings show that crises enable the learning related to crisis management and the development of firm capabilities that go beyond it by triggering new knowledge development, increasing motivation to search for causes and solutions, improving ability to learn and absorptive capacity (Christianson et al., 2009). The path dependent nature of knowledge acquisition and learning by sub-suppliers are confirmed by these findings. Overall, these findings show the importance of serendipity that contributes to unanticipated findings and to the reformulation of the general theory (Ketokivi and Choi, 2014).

Third, our study demonstrates the coupled effect of framing of social sustainability requirements and its associated procedures on fairness perceptions and reciprocal behaviour of sub-suppliers. This shows that framing per se cannot create changes in sub-supplier behaviours. Framing can act as a trigger to make sub-suppliers perceive the significance of social sustainability; however, it has to be combined with the appropriate procedures, including incentives (Wilhelm et al., 2016) and awareness-creating initiatives (Huq et al., 2016) to make them continually see the benefits linked to implementing social sustainability.

Fourth, our findings related to negative reciprocity show how some sub-suppliers rationalised their own unethical behaviour toward workers based on their treatment by the intermediary. Bandura (1999) refers to this as displacement of responsibility, which involves individuals rationalising unethical behaviour by displacing the responsibility of their action onto others. Such rationalisations of sub-suppliers can be further studied through moral disengagement theory, which focuses on cognitive mechanism individuals employ to rationalise their unethical behaviour.

Finally, we add momentum to a recent effort to shift research on behavioural operations management (Croson et al., 2013), but with a qualitative case study twist, by which it can address vital questions about the extent to which sub-supplier responses to intermediary

requirements are influenced by psychological factors and socio-cognitive processes. While there is an increasing recognition of micro-level interactions in supply chain relationships (Borgatti and Li, 2009), research in the area of social sustainability in supply chains has not delved deep into the life experiences and routines of sub-suppliers. Thus, we call for more research to dig deeper into the perceptual factors and associated socio-cognitive processes that influence intermediary framing and developing country sub-supplier everyday management of social and environmental sustainability among all the other challenges they face.

7.2. Managerial implications

Our study offers numerous practical recommendations for lead firms and intermediaries to manage social sustainability in supply chains. Lead firms are partly responsible for their intermediaries' framing of sustainability requirements. Their own framings can spillover to shape their intermediaries' framings and management of social sustainability in the entire supply chain. Lead firms tend to invest in developing and using sophisticated mechanisms like certifications and multi-stakeholder initiatives to address social sustainability issues (Locke et al., 2009; Soundararajan and Brown, 2016); however, the adoption of inappropriate framing and unsupportive procedures can hinder their effective implementation. The use of power and pressure to implement social sustainability results in unfair perceptions and negative reciprocity under many circumstances.

Further, our study illuminates the flaws in the current forms of social sustainability initiatives. A key flaw is that the perspectives of sub-suppliers from developing countries are often neglected. But, ironically, that is where the majority of the production activities occur. Thus, their voices must be included in the development of any sustainability initiatives they are required to implement in order to improve their perceived fairness and positive reciprocity. Partners, large or small, powerless or powerful, need to work together to yield mutually beneficial outcomes.

Furthermore, our study offers some practical implications for the management of crises in supply chains. Due to their geographical and institutional spread, multi-tier supply chains are prone to different forms of crises (Jüttner, and Maklan, 2011). Better supply chain relationships are critical for effective crisis management (Chopra and Sodhi, 2004). The findings show that pre-crisis framing is an important antecedent to how relationships work during crisis (Kim and Cameron, 2011). This insight reinforces the path-dependent nature of the relationship between intermediaries and sub-suppliers. The study's findings related to crisis also show that the framing of social sustainability requirements can have many unintended consequences.

7.3. Limitations and future research directions

Our study of the micro-level interactions between intermediaries and sub-suppliers in developing countries with respect to social sustainability management is only a starting point. We offer numerous testable propositions for future research. More needs to be done to develop an in-depth understanding of the framing, fairness perception, reciprocity, and factors that shape them. For example, future research can explore the antecedents of different framings adopted by intermediaries. While lead firm behaviour in part contributes to an intermediary's framing, many other factors related to context and personal characteristics can also play a part. We would also encourage researchers to scrutinize the effects of framing on specific issues of working conditions or social sustainability. For example, opportunity framing may not have the same effect on collective bargaining due to local customs. Also, the influence of framing on the fairness perceptions of sub-suppliers can be contingent upon numerous factors beyond those associated with crises. Future research should explore these factors.

Further, our study focused only on the intermediaries and sub-

suppliers connected through informal spot production order contracts. Future research is needed to understand if the findings are applicable if formal long-term contracts are in place. As mentioned, sub-supplier behaviour can be subjected to spillover effects due to the framing of other current and past intermediaries. Although we used certain compartmentalisation strategies to maintain the uniqueness of the data collected, we cannot certainly discount the spillover effects. Therefore, future research is needed to understand the nature of these spillover effects and its influence on the study's insights.

Furthermore, our study emphasizes procedures like dialogue and knowledge sharing as mediating mechanisms that connect framing and fairness perceptions. Future research can build on this and explore more mediating mechanisms. Although this study only explores social sustainability (mainly working conditions), the proposed constructs could be applied to other dimensions of sustainability requirements. However, the effects and boundary conditions may differ, which calls for future research.

We used interviews as the primary method of data collection; these offer retrospective accounts at multiple points in time and may limit our understanding of the messy day-to-day interactions between intermediaries and sub-suppliers. While an ethnographic method is the best alternative, it may not be practically possible to use it in studies that focus on developing country actors and on 'sensitive issues' (Lee, 1993) such as social sustainability. However, in other disciplines there are precedents for ethnography-based studies on working conditions in developing country supplier facilities (De Neve, 2008). Future research on operations management can refer to these works to explore and utilize the power of more ethnographically oriented work for studying social sustainability among developing country intermediaries and sub-suppliers. When it is practically impossible to conduct ethnographic studies, researchers can use a combination of methods that includes

participant and non-participant observations, and informal conversations.

There is a need to do further research on the influence of crises on social sustainability in multi-tier supply chains. We suggest that a configurational approach (Wiklund and Shepherd, 2005) may offer a tremendous opportunity to explore how different factors combine to influence the effect that crises have on social sustainability in supply chains. A configurational approach also enables the understanding of how a specific type of crisis, when combined with various factors, influences framing and fairness perceptions. Another avenue for research involve considering how and when framing contributes to the development of crisis prevention capabilities. More research is also needed to understand the influence of crisis on intermediaries framing and the dynamic influences that follow. Our findings related to crisis are based on two dyads that shifted their framings during crisis. Therefore, more case research is needed to test the robustness of these findings and expand them. Specifically, more research is needed to understand the antecedents of frame maintenance and frame shift and its influence on sub-suppliers' fairness perceptions and reciprocity.

Finally, the generalizability of our findings is arguably limited. While we think that the core themes of our analysis are likely to be applicable to intermediaries and sub-suppliers located in other developing country contexts such as those of China or Bangladesh, further research is indeed needed to explore the boundary conditions to the application of our model. In addition, intermediaries and sub-suppliers in the supply chains of forest products, or in the consumer electronics are big and powerful (Wilhelm et al., 2016). The relational dynamics of these dyads can be different from those that were explored in this study. Thus, research on the micro-level exchanges between these dyads with respect to the management of social sustainability can offer novel insights.

Appendix 1. Opportunity framing, procedures, fairness perception and reciprocity

Dyad	Opportunity framing	Procedures	Perception of fairness	Positive reciprocity
I3-SS4	Having good labour conditions are seen very positively in this business. I know it is not easy to maintain working hours, ESI and PF [social security]. But, they [SS4] need to try. (Intermediary: I3)	I'm happy to help them with anything they [SS4] need. They just need to ask me. (Intermediary: I3) I needed money to build toilets. I had financial constraints at that time. I visited my bank numerous times. They asked for this document and that document. I shared my frustration with him [I3]; he immediately made a phone call to the bank manager and asked him to help me out. (Sub-supplier: SS4)	How many out there will be willing to make a phone call to the bank manager for you? Even my relatives won't. It is very rare these days to find such people ... I can say that he [I3] won't ask for unnecessary things. (Sub-supplier: SS4)	Whatever he [I3] asks me to do. I will do ... I have people to clean toilets every morning. It shines like a crystal. Did you see? (Intermediary: I3) The toilets in our factors are like a 5-star hotel. You can sit there and talk (Worker)
I6-SS7	They [SS6] learnt everything through experience. They replicate what they learned when they were workers. I have to teach them. I have to tell them [SS6] that compliance is important for the long-term. (Intermediary: I6)	Not many in this industry know what the labour laws say. My supplier [SS7] was struggling to meet my requirements. I just asked for regulations. I asked my manager to visit his factory to create awareness. After visiting the factory, my manager gave me the idea of sharing the print materials we have. (Intermediary: I6)	He does not have to do these things. He can just order me. I have to thank god. (Sub-supplier: SS7)	You can see the pictures [pointing towards the direction of the pictures]. It talks about worker rights. Now, I'm scared of my workers [laughing]. (Sub-supplier: SS7) I did not know anything about my rights. I'm not very educated. These pictures taught me a lot. (Worker)

Appendix 2. Insulation framing, procedures, fairness perception and reciprocity

Dyad	Insulation framing	Procedures	Fairness perception	Reciprocity
I4-SS5	It is just a cover-up. They [lead firms] don't want be in the reports and newspapers about labour issues with a poor looking labour picture. All they need is a certification. And all I need from him [SS5] is a certification that can help me tick the box. (Intermediary: I4)	No one helped me. You need to work hard to grow up ... Is it [helping sub-suppliers] going to give me money? (Intermediary: I4) We have not spoken a lot about working conditions. My job is to process the orders. As far as I do that, they [I4] are happy. (Sub-supplier: SS5)	It is like walking on fire. I can't understand the labour laws clearly. I'm not that educated enough to understand them ... You can see I'm small. I need help. (Sub-supplier: SS5)	He does not have time for people like us. (Sub-supplier: SS5) I'm a contract worker ... No I don't have ESI, PF (Worker)
I9-SS10	Oh these days it is fashionable for buyers to say that we are improving the lives of people in India and Bangladesh. It is all about business. No one cares about people here. It is all about business. They [lead firms] want to show that they have no labour issues anywhere in their supply chain. Can they do it? No. Who has to? I have to. (Intermediary: I9)	I do not want to lose my business. He [SS10] does not want to lose his business either. (Intermediary: I9) One day he [I9] will come and say, the lights are very dull, change them. That's it he leaves. (sub-supplier: SS10)	Who will pay for the lights? I have to rob a bank. He will tell things as if he had already deposited 1 Crore into my account. (sub-supplier: SS10)	I didn't agree with my [previous] owner. He was afraid that that I may speak up during the audits. Then one day he asked me to leave the company.

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